REMARKS

Claim 1 has been amended. No new matter has been introduced. Support for the amended claims and the new claims is found throughout the specification, claims, and drawings as originally filed. Twenty-three (23) claims are pending and remain for consideration. Reconsideration of the pending claims and further examination of the application is respectfully requested.

IN THE CLAIMS

35 U.S.C. § 102

Claims 1-23 are rejected under 35 U.S.C. § 102, as anticipated by U.S. Patent No. EP 0890470, to Sawamoto. This rejection is respectfully traversed.

Claim 1 recites a target object position sensing apparatus for a host vehicle. The target object position sensing apparatus comprises a lane detection apparatus provided on the host vehicle. The lane detection apparatus includes an image acquisition means adapted to capture an image of at least a part of the road ahead of the host vehicle. A vehicle path estimation means is adapted to estimate a projected path for the host vehicle. A target vehicle detection apparatus is located on the host vehicle. The target vehicle detection apparatus is adapted to identify the position of any target object located on the road ahead of the host vehicle. The position includes data representing the distance of the target vehicle from the host vehicle.

Although the rejection is traversed, Claim 1 has been amended, without prejudice or disclaimer, to present the claims in better form for consideration. In particular, Claim 1 has been amended to replace the word "determine" with the word "predict" with regard to the function of first data of processing means. That prediction is involved is clearly inherent in the description of the invention as filed, particularly, with reference to line 12 of page 6, and lines 4-8 of page 14 of the present application.

As amended, Claim 1 further recites first data processing means that is adapted to predict a target lane in which the host vehicle will be located when it has traveled

along the projected path by the distance to the target object, and second processing means that is adapted to compare the position of the target vehicle determined by the target vehicle detection means with the position of the target lane to provide a processed estimate of the actual position of the target object.

The Examiner asserts that EP 0890470 A2 to Sawamoto et al. (hereinafter, "Sawamoto") discloses a first data processing means adapted to determine a target lane in which the host vehicle will be located, and a second processing means adapted to compare the position of the target vehicle determined by the target detection means witH the position of the target lane.

Applicants respectfully traverse. Sawamoto does not disclose first data processing means and second processing means as recited in independent Claim 1. The target vehicle detection apparatus of Sawamoto does indeed determine the distance of the target vehicle from the host vehicle (column 5, line 50). However, Sawamoto does NOT use this determination to determine a target lane. It may determine a target lane based on the yaw rate or steering angle of the vehicle, but this is not a target lane *as claimed.* According to Claim 1, the target lane is based on an extrapolation of the projected path by the distance of the target object (as measured by the target vehicle detection apparatus). The "target lane" is either by default the present lane or, when a lane change is detected (by, for example, steering and/or exceeding a certain limit) then one lane to the left or right. Sawamoto does not use an extrapolation of the projected path to determine the target lane.

Accordingly, it follows that Sawamoto must also lack the second processing means, as it does not calculate a target lane within the meaning of claim 1. It may determine whether a target vehicle is within the lane in which it believes the host vehicle to be, but that is not the target lane of Claim 1.

Sawamoto does two things independently. Firstly, Sawamoto plots a path for the host vehicle (col. 7, lines 32 – 33). Secondly, Sawamoto determines whether the host vehicle is changing lanes based on the yaw rate or the steering angle of the host

vehicle (col. 7, lines 9 – 12, and col. 9, lines 2 – 5). However, the predicted path is <u>not</u> used in determining the target lane.
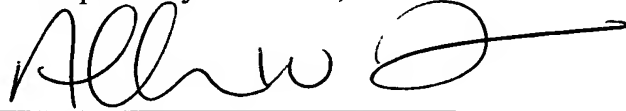
Accordingly, as the first data processing means of Sawamoto does not predict a target lane in which the host vehicle will be located when it has traveled along the projected path by a distance to a target object, then Claim 1, particularly as amended, is novel.

Applicants have also further amended Claim 11, without prejudice or disclaimer. Note that the limitations of amended Claim 11 are common to the two methods disclosed in Figures 3 and 4. Support for this amendment is found on page 13, lines 4 to 18.

It is also noted that the Examiner states, on page 3 of the Official Letter, with reference to Figure 7 in combination with page 9, lines 44 etc. of Sawamoto, that calculation means of the prior art is able to predict the position of the host vehicle in a future path. However, there is no teaching to predict where along a projected path the vehicle would be once it has traveled a distance to a target object and, from this, to determine whether a host vehicle and a target vehicle will be in the same range. Sawamoto calculates a line by assuming the host vehicle will remain in the present lane unless it is determined that it is changing lanes. The presently claimed apparatus does away with the need to determine whether the vehicle is changing lanes. It therefore goes against the teaching of Sawamoto and one skilled in the art of the invention would not come up with the claimed invention having read the teachings of Sawamoto.

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In view of the foregoing remarks, it is believed that the Application is in condition for Allowance. Accordingly, an early Notice thereof is respectfully requested. However, if the Examiner feels that he is unable to issue a Notice of Allowance for any reason, Applicants request that the Examiner contact the undersigned attorney at 419.255.5900 to discuss application further.

Respectfully submitted,

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